

Montana Department of Natural Resources and Conservation  
Water Resources Division  
Water Rights Bureau

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

**Part I. Proposed Action Description**

1. Applicant/Contact name and address: Diamond Cross Properties, LLC, PO Box 70, Big Horn, Wyoming 82833
2. Type of action: Application to Change an Existing Irrigation Water Right 42B 30104916
3. Water source name: Tongue River
4. Location affected by project: Sections 11, 12, 13 and 14 T7S R42E
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:  
Applicant proposes to add three pumps in the Tongue River as points of diversion. The pumps are located in NWNWSW Section 13, NWSESE Section 11 and NENESE Section 11 T7S R41E, Rosebud County. The pumps supply individual sprinkler systems and both the pumps and sprinklers are in place. This application is to bring the additional points of diversion into compliance. The Applicant proposes to continue to use the FL Ditch to supply water to acres not served by sprinkler systems. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)  
Montana Department of Natural Resources and Conservation  
Montana Department of Fish, Wildlife and Parks  
Montana Department of Environmental Quality  
Montana Natural Heritage Program  
Montana Sage Grouse Habitat Conservation Program  
United States Fish and Wildlife Service  
United State Natural Resource Conservation Service

**Part II. Environmental Review**

**1. Environmental Impact Checklist:**

**PHYSICAL ENVIRONMENT**

**WATER QUANTITY, QUALITY AND DISTRIBUTION**

**Water quantity** – The Tongue River in the area of the proposed project is listed by the Montana Department of Fish, Wildlife and Parks as periodically dewatered. The proposed project does not increase irrigation withdrawal from the river and, in general, would decrease the flow rate of withdrawals. Because no additional water would be appropriated, the project will not worsen the periodically dewatered condition of the source.

*Determination:* No significant impact

**Water quality** – The Tongue River in the reach between the Tongue River Dam and Prairie Dog Creek is listed as fully supporting agriculture and drinking water. The source does not fully support aquatic life due to low flow alterations. The Water Quality Category is 4C for which a TMDL is not required. The proposed project will change a flood irrigation water right to sprinklers. Increased efficiency in irrigation projects decreases the likelihood that return flows or runoff would affect the source. The proposed project is likely to have a positive effect on water quality.

*Determination:* Possible positive impact

**Groundwater** – The proposed project may reduce groundwater recharge in the immediate region of the irrigated fields due to less infiltration from flood irrigation practices. The groundwater return flow is constrained between the bluffs to the west and the Tongue River to the east such that reduced infiltration would not affect groundwater levels or quality outside the irrigated property.

*Determination:* No significant impact

**DIVERSION WORKS** – The diversion works and conveyance facilities are in place at present so there will be no construction activity. The diversions are pumps set in the river which do not create channel impacts or barriers to aquatic life. No dams are anticipated and impacts to riparian areas and flow modifications to the Tongue River are already in place.

*Determination:* No significant impact

#### **UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

**Endangered and threatened species** – The Montana Natural Heritage Program lists eleven species of concern within the township and range of the proposed project area. These are the Townsend's Big-eared bat, the Black-tailed Prairie Dog, the Hoary Bat, the Golden Eagle, the Great Blue Heron, the Pinyon Jay, the Brewer's Sparrow, the Spiny Softshell, the Snapping Turtle, the Plains Spadefoot and the Sauger. There are two plant species of concern: the Barr's Milkvech and the Woolly Twinpod. The irrigation of this agricultural land has been active since the early 1900's and agricultural irrigation would continue on the same acres. The project is only to add pumps in the Tongue River to increase efficiency. No changes to habitat and no barriers to movement of land or aquatic species will occur. The northernmost portion of the project area lies within general sage grouse habitat as mapped by the Montana Sage Grouse Habitat Conservation Program. Carolyn Sime, Program Manager, in letter dated February 3, 2016, determined that the activities proposed are consistent with the Montana Sage Grouse Conservation Strategy.

*Determination:* No significant impact

**Wetlands** – The United States Fish and Wildlife Service National Wetlands Inventory shows no wetlands within the project area. Wetland plants are limited to the riparian region along the banks of the Tongue River.

*Determination:* No significant impact

**Ponds** – There are no ponds within the project area at present and no ponds are proposed.

*Determination:* No impact

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** – Dominant soil types in the project area are Havre and Yamacall Loams with low slopes. The project areas have been irrigated historically. No alteration of stability or moisture content is likely from a change in the point of diversion of irrigation water from the source. The soils are not heavy in salts and the change in diversion will not contribute to saline seep.

*Determination:* No significant impact

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** – Existing vegetative cover is agricultural. No change to the land use is proposed and because the diversion, conveyance and application facilities are in place no construction or installation activities would allow the spread or establishment of noxious weeds.

*Determination:* No significant impact

**AIR QUALITY** – Change in the point of diversion of irrigation water has no potential to affect air quality.

*Determination:* No impact

**HISTORICAL AND ARCHEOLOGICAL SITES** – The proposed project is not located on State or Federal land.

*Determination:* Not applicable

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** – No environmental impacts not previously discussed are recognized.

*Determination:* No impact

<b>HUMAN ENVIRONMENT</b>
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**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** – There are no known environmental plans or goals in the project area.

*Determination:* No impact

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** – The project area is not adjacent to any recreational or wilderness areas. The primary road along the Tongue River passes by the project area and provides access to fishing along the river. The change in point of diversion for irrigation water does not affect access to or quality of any recreational activities. There are no nearby wilderness areas.

*Determination:* No impact

**HUMAN HEALTH** – The change in point of diversion for irrigation water has no potential to affect human health.

*Determination:* No impact

**PRIVATE PROPERTY** - Assess whether there are any government regulatory impacts on private property rights.

Yes\_\_\_ No X\_\_\_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

*Determination:* Not applicable

**OTHER HUMAN ENVIRONMENTAL ISSUES** - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

*Impacts on:*

- (a) Cultural uniqueness and diversity? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (c) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact
- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (h) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) Safety? No significant impact

(k) Other appropriate social and economic circumstances? No significant impact

**2. *Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: No secondary impacts are likely from the movement or addition of pump sites in the Tongue River.

Cumulative Impacts: There are other agricultural operations along the Tongue River that should or plan to change their points of diversion to comply with the Montana Water Use Act. None of these possible changes has much potential to affect any environmental resources or any human population. No significant applications for water or changes in place of use or purpose of existing appropriation rights are pending or anticipated.

**3. *Describe any mitigation/stipulation measures:*** None

**4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** The only reasonable alternative to the proposed action is the no action alternative. The no action alternative prevents the applicant from increasing the efficiency of water use and prevents the applicant from coming into compliance with the Montana Water Use Act. There are no significant environmental impacts that would be prevented by the no action alternative.

**PART III. Conclusion**

**1. *Preferred Alternative:*** Issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

**2 *Comments and Responses:*** None

**3. *Finding:***  
Yes \_\_\_ No X Based on the significance criteria evaluated in this EA, is an EIS required?

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:* No significant impacts of the proposed action were recognized and some possible positive environmental outcomes were noted. The lack of significant impacts from the action indicates that an Environmental Assessment is the appropriate level of analysis and that an Environmental Impact Statement is not required.

*Name of person(s) responsible for preparation of EA:*

*Name:* Mark Elison

*Title:* Hydrologist

*Date:* 7/27/2016

